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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: :
Hans-Ulrich PETEREIT et al : GROUP ART UNIT: 1615
SERIAL NO: 09/913,720 : EXAMINER: Robert JOYNES
FILED: August 31, 2001 :
FOR: INJECTION MOLDING METHOD FOR NEUTRAL
AND ACIDIC-GROUP CONTAINING (METH) ACRYLATE
COPOLYMERS

REPLY BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

This is responsive to the Examiner's Answer mailed June 17, 2004.

RESPONSE TO ARGUMENTS

The Examiner argues on page 4 of the Examiner's Answer that, although the Lehmann reference does not expressly teach that the extrusion step is the devolatilization step as in the process of the reference, Lehmann does teach that an extrusion step can be performed, while forming the capsules with the same polymers. The Examiner further states that the Vetter reference is being used to show that an extrusion step is known in similar methods using the same or similar polymers, as used with the devolatilization step in the process of the patent claims.

However, it is clear from the Lehmann reference that the extrusion step referred to in column 3, line 12 is an ordinary extrusion step and does not encompass a devolatilization step like that of the present claims, which is described in column 5, lines 21 et seq. of Vetter and

in Example 1 and Example 3 (comparative) of the present specification and which clearly indicates that a ordinary extruder and a devolatilization extruder are different devices.

Therefore, it is clear that the ordinary extrusion step in Lehmann cannot be equivalent to a devolatilization step, as shown in Vetter.

The Examiner states on page 5 of the Examiner's Answer that the claims do not recite that the polymer must be untreated. However, it is clear from the claims that there is no formation of a partially or fully imidized (meth)acrylate copolymer, which is clearly shown in the specification and examples of Vetter as the reaction product of polymethylmethacrylate with a treatment agent of ammonia or amines. Therefore, it is clear that the present claims do not include a reaction product like that described in Vetter.

On page 5 of the Examiner's Answer the Examiner again argues that, while Vetter does teach the positive inclusion of water, the present claims do not exclude the addition of water and the use of "comprising" allows for the addition of other components. However, as stated in the Appeal Brief on pages 4 and 5, the specification clearly teaches away from the positive addition to water in the process of the present claims and motivation cannot be alleged for the positive addition of a constituent, which is clearly taught away from being added in the process of the present claims.

On pages 6 and 7 of the Examiner's Answer the Examiner argues that, with regard to the comparative examples and comparative results in the specification, Example 1 and Example 2 (comparative) do not use the same mold release agent, do not use the same amounts of mold release agent and the examples are extruded at different temperatures. However, since the present claims do not limit the mold release agent, it cannot be seen that the type of mold release agent would play any significant role in the performance of either composition, as long as the amount of the mold release agent in the inventive example is within the amount range of the present claims, as is the case, and the mold release agent of

the comparative example is outside the range of the present claims, as is the case. Finally, if the two examples are heated to a temperature at which the composition can be extruded, there would be appear to be no significant effect on the performance of the examples, other than that arising from the difference in the amount of mold release agent in the inventive example and the comparative example.

Finally, the Examiner is silent on the results reported in the present specification between Example 1 and Example 3 (comparative) in which the compositions of Example 1 and Example 3 (comparative), which include a mold release agent within the amount range of the present claims, was used in processes for comparison. The process of Example 1, according to the present invention, includes a devolatilization step, while the process of Example 3 (comparative) has an ordinary extrusion step with no devolatilization step included therein. While the capsules produced in Example 1 according to the invention were transparent, mechanically stable and could be utilized for further testing, the capsules obtained in Example 3 (comparative) had surface defects, such as streaks, grooves and uneven areas, and do not meet the capsule quality requirements. Therefore, it can be seen that the addition of a devolatilization step to the process of the closest prior art, Lehmann et al., produces capsules with superior properties, as compared to capsules produced by the process of Lehmann et al. without the devolatilization step.

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Reply to Examiner's Answer of June 17, 2004

In view of the preceding arguments, Appellants respectfully request that the
Examiner's rejection of Claims 1-8, 10 and 11 be REVERSED.

Respectfully submitted,

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